From: Stoick, Paul T CIV USN NAVFAC SW SAN CA (USA)

To: Praskins, Wayne

Cc: Hays, David C Jr CIV USARMY CENWK (USA); Liscio, Matthew P CIV USN NAVSEA DET RASO VA (USA);

Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA); Kahles, Gregory R (Greg) CIV USN NAVSEA DET RASO

VA (USA)

Subject: RE: HPNS building RGs

Date: Friday, August 20, 2021 12:24:16 PM

Wayne,

Thank you for last week's discussion on fieldwork implementation and approaches to validating the risk model assumptions.

In general, we're planning to implement the fieldwork as outlined in Section 4.1 "Building Investigation Design and Implementation" of the Final Parcel G Removal Site Evaluation Work Plan.

For the removable fraction/activity, we do not believe there is a need for the change to the work plan approach. The direct measurements and swipe samples will be collected to analyze potential gross alpha and beta removable contamination. The primary objective will be to determine the total removable activity, however a percentage can also be determined.

For the maximum extent of contamination, the Survey Units are currently proposed as the decision units. However, it should be noted that the decision rules include a point-by-point comparison with the RGs. This may mitigate the need to refined decision units and allow for evaluation of the data after it is collected, without a change to the Work Plan approach.

The current MDCs are found in tables 4-8 and 4-9 of the Work Plan. MDC calculations will be update during survey preparations (background measurements) using instrument, ROC, and surface material-specific information, however the MDCs are not expected to change significantly. In general, the scan MDC can't technically or practically be lowered. The static and swipe MDCs could be lowered with longer count times.

I would like to set up a call next week with the EPA/USACE/RASO and contractors to discuss what would be considered appropriate MDCs for verifying assumptions. Would you be available Thursday morning for me to set something up? If not, is there another time that may work better?

Thanks, and have a great weekend!

V/r,
Paul Stoick, P.E.
Environmental Engineer
Lead Remedial Project Manager - Hunters Point
\$\infty\$ 619-524-6041 | paul.t.stoick.civ@us.navy.mil

NAVFAC Southwest - Navy BRAC PMO West 33000 Nixie Way Bldg 50, 2nd Floor San Diego, CA 92147

https://bracpmo.navy.mil/ | http://www.navfac.navy.mil/go/erb

From: Stoick, Paul T CIV USN NAVFAC SW SAN CA (USA)

Sent: Tuesday, August 10, 2021 10:04

To: Praskins, Wayne <Praskins.Wayne@epa.gov>

Cc: paul.stoick@navy.mil; Hays, David C Jr CIV USARMY CENWK (USA)

<David.C.Hays@usace.army.mil>; Liscio, Matthew P CIV USN NAVSEA DET RASO VA (USA)

<matthew.liscio@navy.mil>; Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA)

<derek.j.robinson1.civ@us.navy.mil>; Kahles, Gregory R (Greg) CIV USN NAVSEA DET RASO VA (USA)

<gregory.r.kahles.civ@us.navy.mil>

Subject: RE: HPNS building RGs

Wayne,

That's great – I'll send out a meeting invite with a call-in number.

Thanks!

V/r, Paul

From: Praskins, Wayne <Praskins.Wayne@epa.gov>

Sent: Tuesday, August 10, 2021 09:13

To: Stoick, Paul T CIV USN NAVFAC SW SAN CA (USA) <paul.t.stoick.civ@us.navy.mil>

Cc: paul.stoick@navy.mil; Hays, David C Jr CIV USARMY CENWK (USA)

<David.C.Hays@usace.army.mil>; Liscio, Matthew P CIV USN NAVSEA DET RASO VA (USA)

<matthew.liscio@navy.mil>; Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA)

<derek.j.robinson1.civ@us.navy.mil>; Kahles, Gregory R (Greg) CIV USN NAVSEA DET RASO VA (USA)

<gregory.r.kahles.civ@us.navy.mil>

Subject: [Non-DoD Source] RE: HPNS building RGs

Paul -

Tomorrow between 10 and noon PT should work for Dave and me

Wayne Praskins | Superfund Project Manager U.S. Environmental Protection Agency Region 9

75 Hawthorne St. (SFD-7-3) San Francisco, CA 94105 415-972-3181

From: Praskins, Wayne

Sent: Monday, August 9, 2021 4:12 PM

To: Stoick, Paul T CIV USN NAVFAC SW SAN CA (USA) <paul.t.stoick.civ@us.navy.mil>

Cc: paul.stoick@navy.mil; Hays, David C Jr CIV USARMY CENWK (USA)

<David.C.Hays@usace.army.mil>; Liscio, Matthew P CIV USN NAVSEA DET RASO VA (USA)

<matthew.liscio@navy.mil>; Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA)

<derek.j.robinson1.civ@us.navy.mil>; Kahles, Gregory R (Greg) CIV USN NAVSEA DET RASO VA (USA)

<gregory.r.kahles.civ@us.navy.mil>

Subject: RE: HPNS building RGs

Paul – I'd like Dave Hayes to join us. I don't think tomorrow will work but let me find out if Wednesday would.

Wayne Praskins | Superfund Project Manager **U.S. Environmental Protection Agency Region 9** 75 Hawthorne St. (SFD-7-3)

San Francisco, CA 94105 415-972-3181

From: Stoick, Paul T CIV USN NAVFAC SW SAN CA (USA) paul.t.stoick.civ@us.navy.mil>

Sent: Monday, August 9, 2021 3:37 PM

To: Praskins, Wayne < <u>Praskins.Wayne@epa.gov</u>>

Cc: paul.stoick@navy.mil; Hays, David C Jr CIV USARMY CENWK (USA)

<<u>David.C.Hays@usace.army.mil</u>>; Liscio, Matthew P CIV USN NAVSEA DET RASO VA (USA)

<matthew.liscio@navy.mil>; Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA)

<a href="mailto: derek.j.robinson1.civ@us.navy.mil; Kahles, Gregory R (Greg) CIV USN NAVSEA DET RASO VA (USA)

<gregory.r.kahles.civ@us.navy.mil>

Subject: RE: HPNS building RGs

Wayne,

Do you have availability early this week for an informal call to discuss potential approaches to verifying assumptions during fieldwork implementation? It would be good to talk through some of the points ahead of the DRC Meeting on Thursday.

I'm available 10-12 tomorrow, and any time after 2. I'm also available any time after 10 Wednesday, except for 1:30-2:30. Mornings would work better to try to get someone from RASO to join from the east coast.

Thanks!

V/r,

Paul Stoick, P.E.

Environmental Engineer

Lead Remedial Project Manager - Hunters Point

2 619-524-6041 | paul.t.stoick.civ@us.navy.mil

NAVFAC Southwest - Navy BRAC PMO West 33000 Nixie Way Bldg 50, 2nd Floor San Diego, CA 92147

https://bracpmo.navy.mil/ | http://www.navfac.navy.mil/go/erb

From: Praskins, Wayne < <u>Praskins.Wayne@epa.gov</u>>

Sent: Wednesday, August 4, 2021 3:37 PM

To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) < derek.i.robinson1.civ@us.navy.mil>

Cc: paul.stoick@navy.mil; Hays, David C Jr CIV USARMY CENWK (USA)

<David.C.Havs@usace.armv.mil>

Subject: [Non-DoD Source] HPNS building RGs

Derek -

Thank you for your comments on the building RG risk calculations I provided on 7/15/21. You provided comments on 7/20/21

- 1. We agree with the comment that the exposure concentrations used to estimate risk from the external pathway should decrease to reflect the amount ingested. To avoid double counting, we will adjust our calculations accordingly. We expect this change to reduce the external risk estimates by about 20%.
- 2. We agree with the comment that assuming a future resident remains in the corner of an impacted building for the entire 26-year exposure period is overly conservative. The calculations we provided on 7/15 include risk estimates for the external radiation pathway for three receptor locations (corner, center, and average). We will use the average receptor location, which we expect to reduce the external risk estimates by roughly 10 20%.
- 3. We have considered the Navy comment proposing to reduce the assumed area of contamination to the floor and two walls. We have not changed our calculations but agree that assuming contamination on all four walls is a conservative assumption for most of the HPNS buildings. We discuss this comment further below.
- 4. We still cannot concur with the Navy's RESRAD BUILD risk estimates for the evaluation of HPNS building RGs. The Navy's RESRAD BUILD risk estimates are based on a number of conservative assumptions. However, after reviewing the Navy's most recent submittal, we are: i) unsure whether appropriate slope factors are used; ii) unclear on the rationale for the assumed exposure time for external radiation (15.3 hours daily), and iii) are unclear whether assumptions about receptor location (center), building size (10' x 10'), and the extent of any residual contamination (i.e., number of walls and whether to include ceiling) represent a reasonable maximum exposure scenario.

5. We understand that there are about 26 radiologically impacted buildings at HPNS where retesting is planned. The buildings vary greatly in size (from hundreds to tens of thousands of square feet), construction materials, and past usage of radiological materials. Given the range of conditions and uncertainty about how the buildings may be redeveloped as residences, it is challenging to select modeling assumptions which reflect conditions appropriate for all of the buildings but do not overestimate risk for a majority of the buildings.

We believe that the best approach is to use reasonably conservative, but not worst-case modeling assumptions, and to verify key assumptions during retesting. That is the approach described in my 7/15 email. Two key assumptions made in EPA's risk calculations (and in the Navy's RESRAD BUILD calculations) are: the maximum removable fraction (20%) and the maximum extent of any residual contamination (32m2 in EPA's 7/15 calculations; 21m2 in the Navy's most recent calculations). Verifying that contamination is limited to the assumed amounts may require lower Minimum Detectable Concentrations (MDCs) than described in the retesting workplans to demonstrate areas assumed to be uncontaminated are not contributing significant risk. We suggest that EPA and the Navy further discuss how these assumptions could be verified during retesting. If agreement can be reached, EPA should be in position to support Navy plans to begin retesting of the HPNS buildings. EPA's final determination about the long-term protectiveness of the buildings would be made after radiological retesting data are available. We supported a similar approach for the soil retesting work.

Wayne Praskins | Superfund Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne St. (SFD-7-3)
San Francisco, CA 94105
415-972-3181